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| APPLICATION NO.          | FI         | LING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO |
|--------------------------|------------|------------|----------------------|----------------------------|-----------------|
| 09/536,366               | 03/27/2000 |            | Christopher J. Edge  | 53492USA02 (EKC<br>90218B) | 3630            |
| 1333                     | 7590       | 04/28/2006 | EXAMINER             |                            | INER            |
| PATENT L<br>EASTMAN      |            |            | BRIER, JEFFERY A     |                            |                 |
| 343 STATE                |            | COMPANI    | ART UNIT             | PAPER NUMBER               |                 |
| ROCHESTER, NY 14650-2201 |            |            |                      | 2628                       |                 |
|                          |            |            |                      | DATE MAILED: 04/28/200     | 6               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)   |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
|  | Application No. 09/536,366  | EDGE ET AL.  |  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |  |
| •  | Jeffery A. Brier  | 2628   |  |  |  |  |  |
| The MAILING DATE of this communication app   |   | <u> </u>   |  |  |  |  |  |
| Period for Reply   |   | •  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was precised to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |   |  |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 10 Fe  | ebruary 2006.   |  |  |  |  |  |  |
| ,  | action is non-final.  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |
| closed in accordance with the practice under E   | •   |  |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>33-37,47-53 and 60-67</u> is/are pending in the application.   |   |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>33-37,47-53 and 60-67</u> is/are rejected  |   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.   |  |  |  |  |  |  |
| Application Papers   | ·   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce  |   | Examiner.  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct   |   |  |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign  | priority under 35 U.S.C. § 119(a)   | )-(d) or (f).  |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |  |  |  |  |  |  |
| 1. Certified copies of the priority documents  | s have been received.   |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |  |
| 3. Copies of the certified copies of the prior   | rity documents have been receive  | ed in this National Stage  |  |  |  |  |  |
| application from the International Bureau  | ı (PCT Rule 17.2(a)).   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list   | of the certified copies not receive   | ed.  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |
|  | •   |  |  |  |  |  |  |
| Attachment(s)  |   | •  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | ate  |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  | 6) Other:   | atent Application (PTO-152)  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/10/2006 has been entered.

## Response to Amendment

2. The amendment filed on 2/10/2006 has been entered.

## Response to Arguments

3. Applicants remarks concerning claims 34 and 35 is acknowledged and since these claims were dependent upon claim 25 and not claim 33 it appears claims 34 and 35 should not have been indicated as being allowable over the prior art applied to claim 25.

In view the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility published on the USPTO website on October 26, 2005,

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101 20051026.pdf

and published in the OG 22Nov2005

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patqupa.htm).

The following 35 USC 101 rejection is now required.

Art Unit: 2628

## Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 33-37, 47-53, and 60-67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 33-37, 47-53, and 60-67 are not directed to a useful, concrete, and tangible result. Similarly these claims are directed to manipulating abstract processes. State Street Bank & Trust Co. v. Signature Financial Group Inc. (CA FC) 47 USPQ2d 1596, 1603 (7/23/1998). AT&T Corp. v. Excel Communications Inc. (CA FC) 50 USPQ2d 1447. On page 1603 first paragraph the CAFC wrote in State Street:

Under Benson, this may have been a sufficient indicium of nonstatutory subject matter. However, after Diehr and Alappat, the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a "useful, concrete and tangible result." Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557. 7

On page 1603 paragraph labeled [4] the CAFC wrote:

[4] The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to 9 -- process, machine, manufacture, or composition of matter-but rather on the essential characteristics of the subject matter, in particular, its practical utility. Section 101 specifies that statutory subject matter must also satisfy the other "conditions and requirements" of Title 35, including novelty, nonobviousness, and adequacy of disclosure and notice.

Application/Control Number: 09/536,366

Art Unit: 2628

See In re Warmerdam, 33 F.3d 1354, 1359, 31 USPQ2d 1754, 1757-58 (Fed. Cir. 1994).

Claims 47-50 are means plus function claims. Since the specification defines the "means" for performing the function to be a software program then these claims are claiming a software program per se rather than a computer system performing the claimed functions.

## Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 33-37, 47-53, and 60-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

#### Claim 34:

Independent claim 34 claims "the source device profile contains raw spectral data that characterizes a source device, and the destination device profile contains raw spectral data that characterizes a destination device". Page 16 lines 18-22 states "Additionally, the device profile 302 optionally stores the raw spectral data used to construct the device profile 302. The raw spectral data allows subsequent construction

of more accurate device profiles 302, e.g., if ICC specifications change." Thus, the claim limitation "characterizes" is not clear from the definition given for the raw spectral data in the specification and the specification does not convey "characterizes". Since the specification describes device profile 302 but not the claimed source device and destination device, the specification does not convey the claim limitations of this claim.

#### Claim 35:

Independent claim 35 claims "wherein each of the source and destination device profiles defines a forward transformation from one of the source and destination color spaces to the device-independent space". Due to the limitation "one of the source and destination color spaces" the source device profiled is being claimed to forward transform from the destination color space and to destination device profile is being claimed to forward transform from the source color space which is not described in the specification and thus this claim limitation is conveyed by the originally filed specification.

#### Claims 36 and 37:

Claims 36 and 37 claim the color map "includes" a look-up table or mathematical expression. Page 20 lines 3-11 of the specification states the color map "is, for example, a mathematical expression or a look-up table". A color map that "include" is different than a color map the "is". Thus, the specification does not convey these claim limitations.

Claims 63 and 66:

Both of claims 63 and 66 claim "the source and destination profile interpreters are configured as removable plug-in modules for use by the color transformer". While applicants specification at page 13 lines 3-6 states: "The device profile interpreters 202 and 208 can be configured using any of a variety of approaches. For example, plug-in software modules can be used to configure the device profile interpreters 202 and 208.". Thus, the specification does not state two critical claimed limitations 1) "removable plug-in modules" and 2) "are configured as removable plug-in modules". The specification describes using a plug-in software module to configure the source and destination profile interpreters but does not convey "source and destination profile interpreters are configured as removable plug-in modules". A software module that configures a device is different than a device that is a software plug-in software module.

Claims 62 and 65:

Both claims 62 and 65 claim the "color transformer adjusts the source and destination device profiled interpreters based on user preferences" while the specification does not convey this claim limitation, see page 16 first paragraph and page 35 line 7 to page 36 line 13.

Claims 64 and 67:

Both claims 64 and 67 claim "the source and destination device profile interpreters are configured based on white-and black-point parameters while the specification at page 12 lines 8-15 describes "interpreters 202 and 208 are optionally configured to include white- and black-point parameters". The claim claims the

Application/Control Number: 09/536,366

Art Unit: 2628

interpreters are configured based upon the parameters while the specification describes the interpreters include the parameters. To configure based on parameters is different than configuring by including parameters.

Claims 48, 49, 52, 53, 60, and 61 claim user preferences include illuminant functions (claims 48, 52, 60) or observer functions (claims 49, 53, 61). Page 12 line 20 to page 13 line 2, page 15 lines 15-22, and page 18 lines 5-9 and lines 12-14 describes illuminant and observer functions but does not describe the user preference include illuminant functions or observer functions. Additionally the parent claims claim the user preference is used to define relationships and the specification does not describe this as seen at the above cited sections of the specification.

Claims 33, 36, 37, 47-53, and 60-64:

Independent claims 33, 47, and 51 each claim "the color transformer adjust coordinates in the destination device color space to the color error" while the specification discloses using page 23 line 15 to page 25 line 18 discloses using more than just the "coordinates in the destination device color space" to reduce color error. Thus, the specification does not covey these claims.

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claims 33-37, 47-53, and 60-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 09/536,366

Art Unit: 2628

Claims 33, 36, 37, 47-53, and 60-64:

Independent claims 33, 47, and 51 broadly claim to reduce color error between the converted coordinates from the source and destination device profile interpreters and does not claim how this is performed. These claims also broadly claim the color transformer adjusts coordinates in the destination device color space to reduce the color error which does not specify how the process in the first wherein clause reduces the color error. Thus, the process for reducing the color error is not definite. All prior art system can be broadly characterized as "reducing color error". It is also not clear if the "converted coordinates" at lines 10-11 are the same coordinates adjusted at line 15 or different coordinates. Independent claims 33, 47, and 51 each claim "the color transformer adjust coordinates in the destination device color space to the color error" while the specification discloses using page 23 line 15 to page 25 line 18 discloses using more than just the "coordinates in the destination device color space" to reduce color error. Thus, the metes and bounds of this claim are unclear.

Independent claim 35 claims "wherein each of the source and destination device profiles defines a forward transformation from one of the source and destination color spaces to the device-independent space". Due to the limitation "one of the source and destination color spaces" the source device profiled is being claimed to forward transform from the destination color space and to destination device profile is being claimed to forward transform from the source color space which is not described in the specification and thus this claim limitation is confusing as to what it is actually claiming.

Art Unit: 2628

Independent claim 34 claims "the source device profile contains raw spectral data that characterizes a source device, and the destination device profile contains raw spectral data that characterizes a destination device". Page 16 lines 18-22 states "Additionally, the device profile 302 optionally stores the raw spectral data used to construct the device profile 302. The raw spectral data allows subsequent construction of more accurate device profiles 302, e.g., if ICC specifications change." Thus, the claim limitation "characterizes" is not clear from the definition given for the raw spectral data in the specification.

9. A prior art rejection cannot be made because the metes and bounds of the claims are not definite and because the specification does not support the claims. Thus, an indication of allowability would be premature. In re Steele, 305 F.2d 859,134 USPQ 292 (CCPA 1962) (it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions).

## Specification

10. The disclosure is objected to because of the following informalities: at page 11 lines 10-13 and page 27 lines 8-10 a US Patent Applicant is discussed, however, its Serial Number is not given; and

At page 26 lines 1-5 Appendix A is discussed, however, this appendix is not present in the Image File Wrapper, and it was not cited on any of the 1449s, thus,

Application/Control Number: 09/536,366 Page 10

Art Unit: 2628

applicant should amend this section of the specification to no longer make reference to the appenix and provide the document with an Information Disclosure Statement.

Appropriate correction is required.

## **Drawings**

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "504" and "508" have both been used to designate destination device profile interpreter 508. page 23 lines 14-15 discusses 504 as referring to source device profile interpreter which is shown in figure 5 above destination device profile interpreter 508. Thus, reference number 504 should refer to the source device profile interpreter. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 09/536,366 Page 11

Art Unit: 2628

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffery A Brier Primary Examiner Art Unit 2628